

such handling may give rise to a subpermanent change of moment which will not immediately disappear. It is, moreover, necessary to take precautions to secure that the temperature of the magnet is known, especially as, in the ordinary use of a Kew magnetometer, an error of even half a degree in the estimate of the temperature is by no means impossible.

(5) For differences of field of the order of $\pm H$ the temperature coefficient is not sensibly affected by the field.

In conclusion, I wish to thank my assistant, Mr. E. Simpson, for help in construction and adjustment of apparatus throughout the work.

Note.—The principle of the compensating magnetometer may be applied to needle galvanometers, and I have constructed an instrument consisting of two galvanometers to test the utility of such an application. I have not yet had an opportunity of fully investigating its possibilities, but it seems likely that a high degree of sensitiveness may be attained with a fair immunity from effects of small local magnetic disturbances. Moreover, for a given resistance, two galvanometers with this arrangement can be made more efficient than one.

On Light-Sensations and the Theory of Forced Vibrations.

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(Received April 19,—Read June 26, 1913.)

[This paper is published in Series B, vol. 86, No. 590.]
